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WPI Acc No: 99-267120/199923

Pi-electron conjugated conductive, soluble polymer - is obtained by doping the new polymer with cations, and is used in batteries or electrochromic displays

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Number of Countries: 001    Number of Patents: 001

Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Main IPC    | Week     |
|-------------|------|----------|-------------|------|----------|-------------|----------|
| JP 11080326 | A    | 19990326 | JP 97242706 | A    | 19970908 | C08G-061/12 | 199923 B |

Priority Applications (No Type Date): JP 97242706 A 19970908

Patent Details:

| Patent      | Kind | Lan | Pg | Filing Notes | Application | Patent |
|-------------|------|-----|----|--------------|-------------|--------|
| JP 11080326 | A    |     | 10 |              |             |        |

Abstract (Basic): JP 11080326 A

A new polymer consists of a specific repeating unit of formula (I), where R = alkyl or alkoxy group.

INDEPENDENT CLAIMS are given for:

(a) a cpd. which is obtained by doping the new polymer with cations;

(b) a new organic display material which consists of the new polymer and changes colour by reversible doping of ions;

(c) a new charging-discharging material which consists of the new polymer and changes its electrochemical state by reversible doping of ions;

(d) a new battery which comprises a negative electrode material of the new polymer which is coated on a negative current collector; and

(e) a new electrochromic display which comprises an electrochromic layer of the new polymer.

The weight average molecular weight is 3,000-100,000. R has 1-30 (4-18) carbon atoms.

The polymer used in the electrochromic display is poly(2,5-dihexyl-1,4-phenylene-2,5-pyridine-diyl) (poly-dhpp). (dhpp = diphenyl phosphino-propane).

Preferred compound: The cation is alkali metal ion or quaternary ammonium ion.

USE - For batteries or electrochromic displays.

ADVANTAGE - The new conductive polymer is soluble in organic solvent. Cation can be doped reversibly into the polymer.

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Derwent Class: A26; A85; G03; L03; P81; P85; U14; V07; X16

International Patent Class (Main): C08G-061/12

International Patent Class (Additional): C08L-065/00; C09D-165/00;

C09K-009/02; G02F-001/15; G09F-009/30; H01M-004/02; H01M-004/60;

H01M-010/40